TREATMENT APPARATUS FOR REGENERATING WASTE PET BOTTLE AND TREATMENT METHOD USING THE SAME

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Abstract of JP2003291144

PROBLEM TO BE SOLVED: To provide a treatment apparatus for regenerating a waste PET bottle capable of efficiently performing regeneration treatment for crushing foreign matter such as a cap, a label, an adhered stain or the like into fine pieces while certainly removing the same and capable of sharply conserving the installation space of the treatment apparatus or an operation cost, and to provide a treatment method using the same.

SOLUTION: In the treatment apparatus and the treatment method used for regenerating the waste PET bottle, the waste PET bottle is divided into a plurality of portions in its body peripheral direction prior to supplying the bottle to a crusher in order to separate the tubular label applied to the bottle by a shrink coating method from the bottle. A bottle vertical dividing mechanism is constituted so as to shear the bottle between one or more sets of disc-shaped rotary blades mutually meshed like 'force-cutting' blades. One or more rows of baffles are arranged in water in a specific gravity difference sorting water tank so as not to agitate the whole of water in the water tank. Bottle crushed pieces are transferred along with water by a pump within the range from a water injecting crushing part to a dehydration part. The discharged water from the respective apparatus constituting elements on the downstream side of the apparatus to be repeatedly circulated and used.

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